



THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re the application of:

CHARLES EDWARD BOWERS

Docket: 30-4397 DIV-1

Serial Number: 10/631,321

Group Art Unit: 3765

Filed: July 31, 2003

Examiner: HURLEY, SHAUN R.

For: UNTWISTED WRAPPED SINGLES YARNS AND CARPETS  
MANUFACTURED THEREFROM

BRIEF FOR APPELLANT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This is an Appeal to the Board of Patent Appeals and Interferences from the Final Rejection of claims 27, 28 and 30-47 mailed May 5, 2006 in the above identified case. A Notice of Appeal is being filed concurrently herewith. An oral hearing is not requested.

The Commissioner is authorized to charge the required appeal brief fee of \$500.00 to Deposit Acct. No. 01-1125. In the event that the Commissioner determines that an extension of time is required in order for this submission to be timely, it is requested that this submission include a petition for an extension for the required length of time and the Commissioner is authorized to charge any other fees necessitated by this paper to Deposit Acct. No. 01-1125.

## TABLE OF CONTENTS

	<u>Page No.</u>
1. REAL PARTY IN INTEREST .....	3
2. RELATED APPEALS AND INTERFERENCES .....	3
3. STATUS OF CLAIMS .....	3
4. STATUS OF AMENDMENTS .....	3
5. SUMMARY OF CLAIMED SUBJECT MATTER.....	3
6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL ...	4
7. ARGUMENT .....	4
8. CLAIMS APPENDIX .....	10
9. EVIDENCE APPENDIX.....	13
10. RELATED PROCEEDINGS INDEX.....	13

### 1. REAL PARTY IN INTEREST

The real party in interest is Honeywell International, Inc., which changed its corporate name from AlliedSignal, Inc, the assignee of record.

### 2. RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal, please note that related U.S. patent application serial no. 10/631,320 filed on July 31, 2003 is currently on appeal (method claims). The notice of appeal was filed on December 27, 2005 and the appeal brief was filed on February 7, 2006. No appeal number has been assigned yet. However, it is not believed that this appeal directly affects or is directly affected by the appeal 10/631,320, nor has a bearing on the Board's decision in this appeal.

### 3. STATUS OF CLAIMS

The claims in the application are 27, 28 and 30-47, all of which are pending, stand rejected and are on appeal.

### 4. STATUS OF AMENDMENTS

An amendment was filed after final rejection. However, the Examiner concluded that the amendment failed to place the application in condition for allowance.

### 5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention claims a Saxony carpet untwisted wrapped singles yarn, and a Saxony carpet formed therefrom, the untwisted wrapped singles yarn comprising:

- a. a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn (see page 4, line 22 - page 6, line 7 of the specification); and
- b. a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn (see page 4, line 22-page 5, line 29; and page 8, lines 20-21);

wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber (see page 4, line 22-page 5, line 29; and page 8, lines 27-32).

A Saxony carpet is a type of carpet in which the individual pile yarn tufts are well defined giving a pointilist effect (see page 1, lines 23-24). Saxony carpets are distinguished from plush carpets. In plush carpets, the fibers from one tuft are indistinguishable from the fibers from surrounding tufts, giving a velvet-like appearance (see page 1, lines 22-23). The Saxony carpets of the invention have a surface appearance, individual tip retention, pile density, resilient hand and wear resistance comparable or superior to conventional Saxony carpets made from multiple plied twist set yarns (see page 1, lines 11-15). The carpets are formed by a process which is an alternative to methods that require typical twisting procedures, avoiding the problems associated with typical twist set carpets, and thereby providing a solution to a need in the art (see page 3, lines 1-5, page 3 lines 13-21, page 5, lines 19-29).

#### 6. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

(a) Claims 27, 28 and 30-47 stand rejected on the ground of nonstatutory, obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. patent 6,682,618.

#### 7. ARGUMENT

The Examiner has rejected claims 27, 28 and 30-47 on the ground of nonstatutory, obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. patent 6,682,618. It is respectfully submitted that the rejection is incorrect and should be overruled.

The present application is a divisional application of parent U.S. application serial number 09/723,643, now U.S. patent 6,658,835. After the original filing of parent U.S.

09/723,643, a restriction requirement was issued dated September 27, 2002, forming three groups of claims. The first group of claims was drawn to an untwisted wrapped singles yarn (these claims were granted in U.S. patent 6,658,835). The second group of claims was drawn to the Saxony carpet untwisted wrapped singles yarn and Saxony carpet of currently pending claims 27 and 28 (this application). The third group of claims was drawn to a method of making a Saxony carpet (claims are currently being prosecuted as part of U.S. application serial number 10/631,320). Upon issuing that restriction requirement, the claims of groups 1-3 were held to be patentably distinct from each other and non-obvious variants. Particularly, the non-Saxony untwisted singles yarn of claim group 1 was held to be patentably distinct from the Saxony carpet untwisted wrapped singles yarn because inventions 1 and 2 were mutually exclusive species in an intermediate-final product relationship. The restriction requirement states that the invention of group 1 “is deemed to be useful as reinforcement yarns in composite materials or to make loop pile carpets, or other style carpets instead of Saxony carpets and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants”. Group 1 was selected for examination without traverse.

The Examiner is now rejecting the present claims on the grounds of non-statutory, obviousness-type double patenting over another patent from the present inventor, Mr. Charles E. Bowers, U.S. patent 6,682,618. However, just like group 1 described above, U.S. patent 6,682,618 claims a process and fails to claim Saxony yarns. It is respectfully submitted that it has already been conclusively established on the record for this case that Saxony yarns are patentably distinct and non-obvious compared to a process for producing a yarn, as well as non-Saxony yarns, because the non-Saxony yarns are “useful as reinforcement yarns in composite materials or to make loop pile carpets, or other style carpets instead of Saxony carpets”. The present double patenting rejection is therefore in conflict with the conclusions drawn in the restriction requirement. It is not understood how the restricted claims of group 1 (granted in U.S. patent 6,658,835) can be established as patentably distinct and non-obvious compared to the currently pending claims, while the more significantly different claims of U.S. 6,682,618 can be considered non-

patentably distinct obvious variants of the current claims. It is urged that this inconsistency is further evidence that the double patenting rejection is improper.

As previously submitted, the presently claimed invention is further distinguished from the claims of U.S. patent 6,682,618 for the following reasons. As the Examiner points out, a nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy and which is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinguishing from claims in a first patent. Determining if a double patenting rejection is appropriate involves the answers to the following inquiries: Is the same invention being claimed twice? If not, are the inventions directed to the same inventive concept with a change in scope or directed to obvious variations of the same inventive concept?

Regarding the first query, the Examiner argues that although the conflicting claims are not identical, the same invention is being claimed twice because the two sets of claims are not patentably distinct from each other. However, it is urged that the same invention is clearly not being claimed twice. Double patenting rejections are based solely on a comparison of claims. Accordingly, the only text that the Examiner is legally permitted to reference in applying a double patenting rejection is the text of the claims. Looking only at the text of the claims from the 6,682,618 patent, it is respectfully asserted that the rejection is improper at first glance because claims 1-5 of U.S. patent 6,682,618 are process claims while the claims of the present invention are article claims. More particularly, the claims of this invention are directed to an untwisted wrapped singles yarn and a Saxony carpet manufactured from an untwisted wrapped singles yarn, while the claims of U.S. patent 6,682,618 are directed to a process for producing a yarn suitable for tufting. The same invention is not being claimed twice and the claims of this invention and claims 1-5 of U.S. patent 6,682,618 are patentably distinct from one another. Accordingly, the first query is not satisfied and the double patenting rejection is incorrect.

Regarding the second query, it is respectfully submitted that the claimed invention is not an obvious variant of the claims of U.S. patent 6,682,618. The presently claimed invention relates to a Saxony carpet untwisted wrapped singles yarn. More particularly, the invention pertains to a Saxony carpet untwisted wrapped singles yarn comprising:

- a) a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn; and
- b) a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn; wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber. The invention also pertains to Saxony carpets which are formed using untwisted wrapped singles yarns.

Appellant respectfully urges that the presently claimed invention differs from claims of U.S. patent 6,682,618 because U.S. patent 6,682,618 fails to claim Saxony carpet untwisted wrapped singles yarns, particularly comprising a base synthetic fiber wrapper yarn containing heat activated binder material.

Claim 1 of the applied reference claims of U.S. patent 6,682,618:

1. A process for producing a yarn suitable for tufting, said process comprising the steps of:
  - a. forming a bundle consisting essentially of a first base fiber prior to spinning, said first base fiber being selected from the group consisting of polyamides, polyesters, polyolefins, cotton and wool;
  - b. ring spinning or wrap spinning the bundle of fiber with a second fiber to form a yarn, said second fiber being twisted or wrapped uniformly around the bundle of fiber and consisting essentially of a blend of a second base fiber and a heat-activated binder material having a melting point lower than that of said bundle of fiber, said yarn comprising 0.1 to 12 weight percent of the binder material;
  - c. heating the yarn sufficiently to melt the binder material; followed by
  - d. cooling the yarn to solidify the binder material.

In comparison, claims 27 and 28 of this invention claim:

27. A Saxony carpet untwisted wrapped singles yarn comprising:

a. a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn; and

b. a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn;

wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber.

28. A Saxony carpet manufactured from an untwisted wrapped singles yarn, wherein the untwisted wrapped singles yarn comprises:

a. a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn; and

b. a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn;

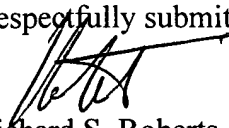
wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber.

U.S. patent 6,682,618 claims a process for producing a twist set yarn where a heat activated binder material is incorporated in a wrapper yarn. The applied reference does not claim the formation of a Saxony carpet untwisted wrapped singles yarn or a Saxony carpet using untwisted wrapped singles yarns. Indeed, as discussed above, the reference does not claim Saxony carpeting or yarns for the formation of Saxony carpeting at all. In contrast, the claimed invention is directed solely to the formation of Saxony carpet using untwisted wrapped singles yarns that are not twist set. Therefore, the claims of the



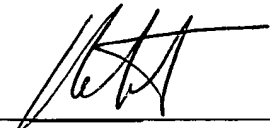
invention and the claims of U.S. patent 6,682,618 differ significantly, and the second query is not satisfied. For all the above reasons, claims 27, 28 and 30-47 should not be subjected to a double patenting rejection over the claims of U.S. patent 6,682,618. There is no extension of monopoly. The claims of this application are not obvious variants over the claims of U.S. patent 6,682,618. Accordingly, it is respectfully submitted that the double patenting rejection is improper and should be overruled. Such action is respectfully requested.

Respectfully submitted,



Richard S. Roberts  
Attorney for Appellant  
Registration No. 27,941  
P.O. Box 484  
Princeton, New Jersey 08542  
Tel: 609-921-3500  
FAX: 609-921-9535  
Date: August 4, 2006

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage pre-paid in an envelope addressed to Commissioner for Patents and Trademarks, P.O. Box 1450, Alexandria, VA 22313-1450, on August 4, 2006.



---

Richard S. Roberts

## 8. CLAIMS APPENDIX

27. A Saxony carpet untwisted wrapped singles yarn comprising:

- a. a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn; and
- b. a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn;

wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber.

28. A Saxony carpet manufactured from an untwisted wrapped singles yarn, wherein the untwisted wrapped singles yarn comprises:

- a. a core strand comprising a member selected from the group consisting of a sliver and a bulked continuous filament yarn; and
- b. a wrapper yarn comprising a member selected from the group consisting of a spun staple yarn and a continuous filament yarn;

wherein said wrapper yarn comprises at least one base synthetic fiber material selected from the group consisting of polyester, polyolefin, polyamide, and a heat activated binder fiber having a melting point at least 20°C lower than the base synthetic fiber.

30. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn is a continuous filament yarn of about 20 to 200 denier.

31. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn is a continuous filament yarn of about 40 to 80 denier.

32. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn contains about 5 to 95 weight percent of the heat activated binder fiber.

33. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn contains about 15 to 85 weight percent of the heat activated binder fiber.

34. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn contains about 25 to 75 weight percent of the heat activated binder fiber.

35. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn makes about 2 to 10 wraps per inch about the core strand.

36. The untwisted wrapped singles yarn of claim 27 wherein the wrapper yarn makes about 3 to 5 wraps per inch about the core strand.

37. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a sliver of about 0.8 to 6 cotton count.

38. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a sliver of about 1 to 5 cotton count.

39. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a sliver of about 1 to 3 cotton count.

40. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a bulked continuous filament yarn of about 900 to 6000 denier.

41. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a bulked continuous filament yarn of about 1000 to 5300 denier.

42. The untwisted wrapped singles yarn of claim 27 wherein the core strand is a bulked continuous filament yarn of about 1000 to 3000 denier.

43. The untwisted wrapped singles yarn of claim 27 wherein the core strand is comprised of at least one member selected from the group consisting of textile fibers of cotton, wool, polyester, polyolefin, and polyamide.

44. The untwisted wrapped singles yarn of claim 27 wherein the core strand contains about 0-12 weight percent of a heat activated binder fiber having a melting point at least about 20 °C lower than the textile fiber constituents.

45. The untwisted wrapped singles yarn of claim 27 wherein the core strand contains about 0 to 6 weight percent of a heat activated binder fiber having a melting point at least about 20 °C lower than the textile fiber constituents.

46. The untwisted wrapped singles yarn of claim 27 wherein the core strand contains about 0 to 3 weight percent of a heat activated binder fiber having a melting point at least about 20 °C lower than the textile fiber constituents.

47. The untwisted wrapped singles yarn of claim 27 wherein the total content of heat activated binder fiber is 0.05-2.5 weight percent of the total yarn.

9. EVIDENCE APPENDIX

None.

10. RELATED PROCEEDINGS INDEX

None.